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ABSTRACT

Due to the belief that written communication about a deaf blind child among professional examiners and treatment agencies can be more accurate and precise, the experimenters developed and evaluated a video tape protocol for the examination of the communication skills of 20 multiply handicapped deaf blind children, who ranged from 3 to 8 years in age. The video tape project stresses interaction of the experimenters with numerous professional consultants and judges experienced in management, education, examination, and evaluation of multiply handicapped children. Prototype development utilizes Behavior Stimulation Procedures (BSP) which consist of five 10-minute units: unstructured orientation of child in examining area, child's task orientation and ability to perform simple eveyday tasks, stimulus orientation in which the child is bombarded with sensory stimuli, interpersonal orientation, and interview with person working with child. Ten consultant judges, using a prototype video tape procedure and behavior rating scale, which consists of the following eight behavior categories: auditory, visual, tactile, and gustatory-olfactory receptive behaviors; and object centered, people centered, tactile motor expressive, and oral expressive communication (see EC 040 600 for scale), evaluate each 10-minute segment of the 20 films, yielding 8000 discrete data items. Project evaluation indicates the films are successful. (CB)

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THE DEVELOPMENT AND EVALUATION OF A VIDEO-TAPE PROTOCOL FOR THE EXAMINATION OF MULTIHANDICAPPED DEAF-BLIND CHILDREN

ED056454

Preliminary Report: Communication Protocol

by

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1

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U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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SUMMARY

It is the process of evaluation and re-evaluation which produces a systematic approach to the problems of severely multi-sensorily handicapped children.

The examination of such children is usually a process similar to that reported by Curtis, Donlon, and Wagner in The Deaf-Blind Child: Evaluating his Multiple Disabilities (1970). There is no doubt that depth reporting such as described by a number of highly specialized examiners is of great value in early planning for children.

There is, however, a need for a relatively brief overview of the child's gross functional communicative level which is reported in a simple and direct way and free from the problems described by Curtis and Donlon in An Analysis of Evaluation Procedures, Disability Types and Recommended Treatments for One Hundred Deaf-Blind Children (1969).

The kind of tool which supplements depth testing and overcomes the problems of simple behavioral description is hopefully represented by this video tape evaluation protocol.

The protocol consists of three distinct parts. First the direction of the child through a series of behavioral observation situations in which he performs a variety of activities from which observations can be made in a relatively structured way. Second, the video tape recording of his behavior in these situations and third, the observation and evaluative rating of his behavior in a structured format.

This technique is being studied further with respect to the reporting of Adjustment and Learning. Reports on these will be issued in 1971 and 1972.

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INTRODUCTION

This project was conceived and undertaken on the basis of preliminary research[1] which indicated to the experimenters that written communication (concerning the deaf-blind child) between professional examiners and treatment agencies leaves much to be desired in terms of semantic accuracy and precision of description. As a result of that experiment the project directors sought to undertake new means whereby communication of evaluation results could occur. It is hoped that the development of this evaluation technique might be applicable to a wider variety of clinical patients than just the multi-sensory handicapped. The project stresses the close interaction of the research project directors with a variety of professional consultants and judges who are experienced in the management, education, examination, and generally in the evaluation of children with severe multi-sensory disabilities. These children have frequently been known as the deaf-blind. Many are part of the rubella population.

In order to enter into the process of developing improved communication between agencies providing service for the handicapped, the long-term plan described here was undertaken.

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[1] Social and Rehabilitation Service Planning Grant number RD-2497-S-67, "An Analysis of Evaluation Procedures, Disability Types, and Recommended Treatment Procedures for 100 Deaf-Blind Children," Curtis, W. S. and Donlon, E. T., 1969.

PROCEDURE

The following list of steps will clarify for the reader the general order of procedures through which this first year of the experiment was accomplished. The first year was concerned with the development of a video tape evaluation protocol for the evaluation and reporting of communication behavior.

Step I: Review of Previous Communication and Evaluation Modes

Through written communication and interaction on a personal basis with a wide variety of interested personnel dealing with the deaf-blind population and particularly in reaction to the above mentioned research project, the experimenters collected and examined potential techniques for communication between agencies which might be used in addition to typical written reports. The experimenters looked for more formalized tests which might be applied to this population and found that such tests were most clearly not available. The experimenters considered techniques for the development of checklists and rating forms which might be included with written materials to enhance the general clarity of the reports and overcome semantic difficulties. Although some such checklists and behavior rating forms are available (for example, the Denver Child's Rating Forms, the Mecham Language Development Scale, the Vineland Scale, Maxfield-Buchholz Scale, etc.), it was determined that these had preliminarily been considered by the experimenters and many people in the field and found to be focused on too high a level for the population under consideration. In most instances it was found that less than ten percent of the questions on these forms or checklists were even remotely relevant in terms of age level and/or behavioral functioning level for the population in this experiment. Although some information on infant rating scales and early childhood development scales for children under two years of age were pitched at the behavioral level of this population, it was found that they did not focus on the primary problems of the population but rather stressed normal developmental activities without inquiring into handicapping overlays and untimely developmental patterns.

The technique of motion picture filming was considered since such equipment was readily available and familiar to most agencies involved in intercommunication about deaf-blind children. It was found, however, that sound equipment for such filming was

extremely expensive and that the time-lapse for development and preparation of the film could be an undesirable problem. In addition, the inability to reuse film made it in the long run a much more costly undertaking than the technique subsequently adopted.

The possibility of open telephone line between evaluating centers and treatment and educational agencies was also considered. Although this is a relatively reasonable financial undertaking and creates an opportunity for ready exchange of information about children and on a very frequent and informal basis, it was believed that certain techniques used in the evaluation and certain information obtained in the evaluation could only be meaningfully applied if it could be observed by the recipients of the test reports as it occurs. It has been previously pointed out by the authors of this research that the process of evaluation often brings forth information which is contrary to the impressions of other examiners and other reporting agencies. When this is the case, it has been observed that to modify the attitudes of the report recipient with respect to the child's competencies is not always an easy process. The only technique which has proved effective has been actual demonstration. For this reason a technique whereby the report recipient could observe exactly what the experimenter or tester observed seemed most critical.

It might be pointed out that this particular research team had previously and regularly tried the technique of bringing an observer from the child's teaching staff to witness the testing process and to report back (in addition to written reports) to the agency where the child might be placed. Although this technique might seem to be one which should have been considered at this point, it is one which had been applied and found to be much superior to a written report but not a solution to the inter-agency communication problem.

In the final analysis and after considerable discussion and experimentation the project personnel accepted the concept of using video tape recordings as a technique for the enhancement of written reports and such technical descriptions as audiograms, medical systems' reviews, reflex evaluation forms, phonetic inventories, intelligence test profiles, etc.

Video tape recording was chosen because first, the equipment for portable video tape recording is relatively inexpensive in contrast to film production equipment. Secondly, the re-usability of video tape makes it less expensive than filming procedure.

Third, the development of skills in video tape recording techniques is relatively simple due to its instantaneous adjustment processes and instant replay when contrasted with the development of competencies in film production, thus making the technique more available to many agencies more rapidly (an important aspect of the research objectives). Fourth, the instant replay aspect of video tape makes the tape immediately reusable by the examining team and thereby makes it possible for them to add or delete parts of the procedures which they wish to convey to the report recipients while the child is still available for testing. The relatively simple process for making copies of video tape reports is an advantage in contrast to the relatively time consuming and expensive reproduction of film reports.

Step II: Research Proposal

The second step in the research procedure was the preparation of an application requesting support from the U.S. Office of Education in the development of a Video Tape Evaluation Protocol to be used as an adjunct to the examining and reporting procedures currently employed in evaluating the competencies and disabilities of severely multi-sensory handicapped children. At this point a preliminary description of what was believed to be a feasible approach to the general activities necessary for the development of such a protocol was described. It was presumed at that time and demonstrated in this project that three critical areas of exploration exist: First, the development of a series of behavior stimulation procedures which must be consistent among all those applying the technique: that is, situation and stimulation variation in a systematic and a describable way which could be applied in any number of centers and communicated between centers. Secondly, it was necessary to develop a video tape recording and evaluation procedure so as to standardize technical production procedures and prevent problems due to characteristics of the media. Thirdly, in order to evaluate the effectiveness of the behavior stimulation procedures in presenting a wide range of potentially significant behaviors for observation by the consumers of the video tapes, it was necessary to develop a behavior rating form and to apply this to the inspection of the tapes in such a way as to determine through expert judgment and reaction whether or not the tapes based on the stimulation procedures did in fact provide a wide range of observable behaviors of clinical importance which must be conveyed in the reporting process.

Actually, there are important by-products of each of these three steps in the development of the total protocol. For example,

the behavior stimulation procedures are useful procedures whether or not they are video taped and are meaningful aids in the examination of the deaf-blind child in any clinical situation. Secondly, the video tape evaluation form and the video tapes are useful tools in teacher training, not only for the display of characteristics in deaf-blind children to students interested in professional service in that area, but also they aid in the application of video tape evaluation procedures as a means of teaching the student the use of this particular technique as it applies to the problems of the handicapped. And, of course, the behavior rating form is a useful instrument with or without video tape as a means of summarizing quickly the range of behaviors seen while observing a child. It is useful for teachers in training as a learning instrument and it is useful for clinicians in practice requiring a brief summary of their observations of a client.

Step III: Initial Planning Conference

A planning conference which involved the development of the preliminary behavior rating form, behavior stimulation procedures and the video tape recording form was held with a panel of consultant judges involved in the field of multi-sensory disabilities. The activities and forms were utilized throughout this first year of the experiment. As an outcome of this initial conference the Behavior Rating Form shown in Figure II was developed. The video tape rating form shown in Figure III was prepared and the behavior stimulation procedures described below were developed after the model, Figure I.

Step IV: Development of Prototype Research Tools

Behavior Stimulation Procedures

Factors which limited the development of the behavior stimulation procedures are the following. First it was important to develop procedures which could be applied within the space, personnel, and equipment limits of most existing centers. Secondly, it was important that techniques be developed which could be applied in a number of centers during the course of this experiment as opposed to one highly refined experimental room which would not be available where the children were located. And finally, procedures were required which could be conducted in such a way that they would be displayable on video tape recordings. For example, techniques usually carried out in the dark could not be utilized in this procedure. Finally a reasonable time limit both for the child and the report recipients was necessary.

Figure I

A MODEL INDICATING THE PARAMETERS OF THE BEHAVIORAL OBSERVATION USED IN CLINICAL EXAMINATION

Terminology Available
For Reporting Observation

BEHAVIOR OBSERVATION

1. Communication
2. Adjustment
3. Learning

VARIATION OF PERSONNEL	VARIATION OF THE PHYSICAL SETTING	VARIATION OF TASKS AND STIMULI
1. number	1. room size	1. table tasks
2. relationship	2. background structure	2. motor skills
3. etc.	3. figure objects	3. problem solving
	4. etc.	4. etc.

The Behavior Stimulation Procedures (BSP) developed for the communication evaluation consisted of five major units, each conducted in ten-minute periods. This allowed a ten-minute "examiners choice" situation wherein the structure was open to whatever the examiner wished to add for clarity either showing the child or showing the examiner making comments.

Each of the ten-minute segments was designed to focus on one aspect of the examination process which was believed important by the experimenters. The segments, in order, as they appear on the tapes are: first, an unstructured orientation in which the child is allowed to move freely within the space of the examining situation. A minimum of materials (frequently none) is available to him during this ten minutes. The only available interaction possibilities are one or two uncomplicated toys, a table and two chairs, an experimental assistant holding the microphone and remaining physically near but not necessarily interacting with the child, and the usual items such as windows, doors and the natural components of a room. Toward the end of this ten-minute period, but for no more than half of it, one of the experimenters or examiners may interact with the child on an unstructured basis such as in rolling a ball back and forth or jumping up and down together or performing some simple activity without command or an effort to seek any kind of closure in the interaction.

Segment Two of the Behavior Stimulation Procedures was labeled task orientation and was concerned with observing the child in his ability to perform some simple everyday tasks. Within this period, the child might be seen stacking blocks, building a form board, tying his shoe, etc. The essential characteristics of this situation is that the focus of the child is directed toward toys, games, objects, or activities rather than toward another person or interaction.

The third ten-minute segment of the video tape was labeled stimulus orientation and consists of a bombardment of the child with sensory stimuli through as many avenues as possible with as many techniques as possible in a ten-minute period. Such things as tuning forks, noise making toys, flashing lights, portable radios, varied textures, bottles of strong odor-producing materials, and a variety of food, are presented to the child in random order and on many occasions in overlapping patterns. It is important to realize in viewing this tape segment particularly that the developmental procedure was not concerned with rigid or structured or minutely regimentized procedures such as one could conduct in a formal testing application. One must realize that the experimenters

did not know which stimuli in what order in any of the situations would be most fruitful in producing opportunities for behavioral observation; therefore, random and varying approaches within broad structures were applied. This, in the hope that the final evaluation ratings of behavior by the consultant-judges and viewers of the tapes would subsequently reveal those situations and stimulus activities most productive. Appendix A lists most of the stimulants used in the research taping.

The fourth ten-minute segment of the tape was labeled interpersonal orientation. The objective within this period was to show the child in a series of situations wherein he was primarily in the process of interaction with other people and relatively free of objects, toys and other environmental components. Two activities commonly carried out within this time period were the conduct of the common interpersonal interaction in a teaching situation centered on communication but not involving objects other than the child's own person or body (for example, an attempt to have the child show his tongue to the examiner or an attempt to cause the child to produce a relatively uncomplicated oral expression) and the simple process of just sitting and holding the child for five minutes.

The final ten-minute segment of each tape was devoted to an interview with the parent, teacher, aide, or person available who was most often and most recently in contact with the child. Questions within this interview period were not pre-structured. It was believed prior to the experiment that the questions which were asked in the interview might well arise out of the desire to supplement the materials observed within the tape situations and also it was hoped that differing questions asked in a variety of ways by more than one examiner might spontaneously produce an opportunity to observe quality of responses which in the end could be selected by the consultant judges as most appropriate for the final protocol. Furthermore, it was believed by the experimenters that no single question was imperative within the interview process. In other words, if specific questions were required it might have been more appropriate to engage in a written report rather than an oral discussion. As a general guide, the experimenters hoped to make some exploration of each of the eight communicative behavior categories of the rating form (Figure II). In the end, of course, this technique proved impossible since no one can predict prior to an interview procedure (where an open ended question is asked) the extent to which an interviewee will respond. The number of questions asked per category are reported however and show surprisingly even spread.

Figure II

BEHAVIOR RATING FORM: PROTOCOL PROTOTYPE: COMMUNICATION

Observer_____Tape #_____Seg. #_____Date_____

	Observable Behavior		1 None	2	3	4	5 Normal
Auditory Receptive Behavior	No	Yes					
Visual Receptive Behavior	No	Yes					
Tactile Receptive Behavior	No	Yes					
Gustatory-Olfactory Receptive Behavior	No	Yes					
Object Centered Communication	No	Yes					
People Centered Communication	No	Yes					
Tactile Motor Expressive Communication	No	Yes					
Oral Expressive Communication	No	Yes					

1. Non-functioning system in this area.

2. Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

3. Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

4. Sufficiently viable to use in educational planning in current state of development but below normal for age.

5. Normal for age for any child.

Behavior Rating Form

The preparation of the video tape protocol was the development of a Behavior Rating Form to be used in the experiment as a technique for describing the range of behavior and types of behavior demonstrated in the tape segments and hopefully to be used at the conclusion of the experiment by the examiners and the tape recipients for contrast and comparison of their reaction to the tapes. It may also be used as a brief visual guide which might focus the attention of the tape users on particular aspects of the tape which they might wish to use for rapid observation of a particular problem. In other words, an important function, perhaps the most important function of the behavior rating guide in the final application of the video tape protocol will be to serve as an "index" to locate areas of maximal and minimal performance in each of the categories of behavior examined in the procedure.

It should be recalled at this point that the research of this first year is aimed only at communicative evaluation and does not hope to describe the entire child. Ordinarily one might follow the customary communication model wherein the receptive, central and expressive segments of the communication system are arbitrarily chosen for evaluation and separate commentary. However, in this instance the experimenters were particularly anxious to avoid ratings of implied behavior as opposed to observed behavior. For this reason the category of central communication skills was omitted. Thus, the areas of receptive and expressive communication were set apart as two major areas to be explored with the addition of one category not commonly applied in most communication models but described by Curtis earlier (1970). This particular category of communication has to do with the referent to which the communication is directed, in this instance, whether or not the child's reaction communicatively is stimulated receptively or expressively in the presence of and in reaction to people as opposed to objects. Thus, one axis of the behavior rating form has three major subdivisions: receptive behavior, expressive behavior, and referent. The expressive behavior category is divided into tactile motor expressive acts and the vocal expressive acts. The receptive category is divided into auditory receptive, visual receptive, tactile motor receptive, and gustatory-olfactory receptive categories. The referent classification is divided into two categories, viz. people centered and object centered options. The rater in the experiment indicates whether or not the class of behavior could have been observed in that situation and in that event to describe the level of behavior

which was observed by rating that behavior on the scale from one to five, with one representing no occurrence of the behavior and with five representing normal performance in that behavior category.

This prototype Behavior Rating Form which is shown in Figure II, was used by the ten consultant judges in rating each of the ten-minute segments of each of the 20 tapes, producing a total of 1,000 rating sheets for the entire experiment. The data from these ratings were utilized in two ways in the results: first, to describe the kinds and level of behavior seen in each of the video tape segments over the 20 children by the judges, and secondly, by the experimenters to prepare a revised Behavior Rating Scale on the basis of the reaction to these results by the judges and at the final conference.

The preliminary research proposal called for a behavior rating form which utilized the terminology described by Curtis (1966), Curtis and Donlon (1969), Donlon, Curtis and Wagner (1970), and Robbins (1963), in previous publications concerned with describing the communicative behavior of the deaf-blind child. It was assumed at that time that the terminology employed in professional literature would be appropriate for clinical descriptions of children. It was discovered early in the process of developing the rating forms that there are two important characteristics of terminology for behavioral description. The first characteristic is that of area or category identification, for example: hearing, vision, language, etc. The second category of terminology is that which is concerned with the quantity of this particular behavior. Some examples might be: "twenty/twenty vision" or "monaural hearing loss of 40dB" or "diminished patellar reflex." Thus, behavior is classified in a two way model with the type of behavior being identified, and if identified, rated as to degree of strength, competence or skill. Further complications in applying terminology result when attempts are made to categorize behavior into groups acceptable to a variety of professional workers and scholars. For example, this may be noted in dealing with the problem of deciding whether this is a high level attribute of sensory behavior or a low level attribute of central behavior. There are of course similar paradigms in each of the sensory-central-expressive modalities. The impact of this on the development of a rating form is that a viewer who is unsympathetic to the particular organizational structure chosen by the test designer may be so uncomfortable in working within the model that it becomes destructive rather than useful. Since the purpose of this experiment is primarily to produce a useable as well as useful product

every effort was made to simplify the behavior rating form in contrast to the inclusion of all terminology which could have been included. Obviously, simplification was necessary on non-scholarly grounds, since it was also necessary to have a form which could be used rapidly while simultaneously viewing the subject in the act of behaving.

Further important reasons for the uncomplicated behavior rating form developed can be deduced by the reader from a study of the preliminary report for this research (Curtis & Donlon, 1969). The report suggests that the terminology usually used to describe the minimally handicapped is at a level considerably beyond that of this particular research population. The reader who feels uncomfortable with this concept might apply terminology of some standard rating forms within the field of communication to either a twelve month old child or a laboratory animal.

Let it be said that because the behavior rating forms and behavior stimulation procedure resulting from the project appear uncomplicated and relatively easy to use, one might assume that such information could occur in almost any report on a child. The original motivation for this research found strongly to the contrary (Curtis & Donlon, 1969).

Video Tape Recording Procedure

The video tape recording procedure was evaluated through a form, Figure III, consisting of direct questions asking the judges to scale the clarity, usefulness and appropriateness of each one hour tape.

Step V: Preparation of Video Tapes and Data Collecting

Subjects

The children utilized in this experiment have been previously identified as children with severe multi-sensory disabilities often called deaf-blind children or multiply handicapped children and are one of the groups receiving considerable attention today due to the increase in population size resulting from the recent rubella epidemic. The particular reason for focusing this research procedure on such children, other than the fact that the project directors have primarily been engaged in evaluating such children, was the fact that this group represents an alternate example of children who do not follow the traditional test oriented

Figure III

PROTOTYPE RATING FORM FOR VIDEO TAPE PROCEDURE

1. Is this situation useful to the examiner observing communicative behavior?

poor				excellent
1	2	3	4	5

2. Is this film useful in observing <u>other</u> <u>than</u> communicative behavior in the over-all evaluation of the child?

poor				excellent
1	2	3	4	5

3. Does this tape have uses for research other than this particular experiment?

poor				excellent
1	2	3	4	5

4. Would this film be a useful addendum to a child's record?

poor				excellent
1	2	3	4	5

5. Is this particular tape a useful teaching aid to professional workers?

poor				excellent
1	2	3	4	5

6. Was the child chosen appropriate for the experiment?

poor				excellent
1	2	3	4	5

7. Were the testing materials appropriate?

poor				excellent
1	2	3	4	5

8. Were the settings appropriate?

poor				excellent
1	2	3	4	5

9. Was the technical quality of the video tape satisfactory?

poor				excellent
1	2	3	4	5

10. What aspects of this film should be particularly reviewed at the post conference?

11. What suggestions do you have for altering the situations for greater usefulness?

examination procedures applied in psycho-educational clinics for children. That is, there have been times in all clinicians' experience wherein they have been forced to choose between the information they obtained through formal tests and their own observational opinions. When tests and observations disagree it is often the later which most influences the examiners' final decisions on the child. In the case of the deaf-blind child or the severely multi-sensorily handicapped child the option to compare observations with test results is not available. Few if any tests are applicable to the population and few if any items on a given test are geared to the level of the children. Consequently, the group represents a special population, being one which can "only" be evaluated through the observational technique.

Parenthetically, this experiment could have been done in such a way that validity procedures could have been applied comparing our observation with standardized results. This technique would have erroneously supported the popular but incorrect assumption that standardized tests are logical and/or appropriate validating bases for behavioral observations. Consequently, this research pitfall was carefully avoided. Strangely enough, one of the most structured and formalized pieces of information available on such children are these supposedly informal, basically unstructured observation results.

The children ranged from age three to eight years. Most were approximately four and one half to five years old, born during the rubella epidemic of 1963. An identification of the children by age, sex, and location at time of testing is available in Figure IV. Specifically, the children were selected as those who were at the evaluation stage with respect to placement in a deaf-blind program. All of the children are in varying degrees of the continuum from just having been identified as a potential candidate for deaf-blind programs to those being considered for inclusion within the first year of a deaf-blind program or preprogram assessment placement. An additional criterion initially applied in the selection of children at the direction of the first planning conference was that the children must be in the early stages of developmental skills, in walking, dressing, toilet training and feeding. Although the children in general showed some effort to develop in some of these categories, many of the children showed considerable problems in these areas at the time of testing. In order to meet the other criteria for the experiment it was necessary to be liberal in the interpretation of this injunction by the research committee. Part of this minor alteration in the population selection procedure was due to the fact that in past years inclusion

Figure IV

GENERAL IDENTIFICATION CHARACTERISTICS
OF EXPERIMENTAL SUBJECTS

Case Number	Client's Initials	Client's Sex	Client's Age Spring 1969	Place Where Film Was Taken
1	L.A.	F	4 1/2	NYIB
2	J.F.	M	4 1/2	NYIB
3	J.D.	M	4 1/2	Syracuse
4	R.H.	M	5	NYIB
5	P.R.	M	4 1/2	Syracuse
6	P.B.	M	4 1/2	Syracuse
7	P.R.	M	4	Syracuse
8	S.G.	M	4 1/2	NYIB
9	K.S.	F		NYIB
10	W.D.	M	4 1/2	NYIB
11	B.C.	M	4 1/2	NYIB
12	J.O.	M		NYIB
13	M.M.	M	8 1/2	NYIB
14	M.W.	M	5	NYIB
15	R.M.	M	5	NYIB
16	D.Q.	M	4	NYIB
17	P.G.	M	4	Syracuse
18	P.Y.	M	4 1/2	Syracuse
19	C.B.	F	5	Talladega, Alabama
20	M.K.	M	6 1/2	Talladega, Alabama

criteria in programs for the deaf-blind frequently specified the ability to dress oneself, feed oneself and show substantial evidence of toilet training and progress. The recent impact of the rubella epidemic on residential and day-care centers along with the altered inclusion criteria resulting from the established regional deaf-blind centers through public funds has resulted in some modification of this as a crucial criterion in initial exploratory placement. For this reason the population as described at the beginning of the experiment changed by the time of experimental video taping.

Selection of Consultant Judges

Consultant judges are identified in Appendix E. They vary from conference to conference due to personal commitments, the experimenters' wish to include a variety of professional backgrounds among the judges and the desire to encompass wide geographic representation from among deaf-blind evaluation and training centers. The general criteria applied are that these consultant judges are actively involved in the process of training, management, teacher preparation and/or research in the field of multi-sensory disabled children. The original research design called for a comparison of judgmental reactions on the basis of professional background. It appears at this point that such a comparison may be meaningless due to the increasing lack of definition between professions (particularly in the behavioral sciences) when all are involved in testing the deaf-blind child.

Selection of Audio and Video Recording Equipment

Video tape equipment selected for this project included the General Electric and/or Sony Tri-pak video tape equipment supplemented by the same company's porta-pak unit. Supplemental Edcor Sensamike units were occasionally employed to enhance audio reception. The total package was selected on the criteria of relatively universal availability of purchase, service and repair, portability of the equipment, simplicity of operation, economy of both initial purchase price and expendable tape supplies and of course simplicity of operation. The use of the equipment does not constitute endorsement of this equipment over other useful equipment for the VTR process. It should be pointed out however, throughout extensive travel and operation by a variety of minimally familiar research personnel, the equipment has maintained itself in excellent condition.

RESULTS

Results of this experiment are manifest in three separate products: first, the video tapes themselves; second, the data acquired through the utilization of consultant judges; third, the video tape protocol consisting of the revised and combined behavior and video tape rating forms and Behavior Stimulation Procedures.

Product I: Video Tapes

Video tape recordings prepared under this first phase of the experiment are 20 in number, each varying in length from 45 minutes to one hour and each showing an individual child who meets the project criteria being photographed and recorded in each of the five situations described under procedure. At the moment, these tapes represent a means to an end, viz., the development of a video tape protocol for the evaluation of behavior in children. However, during future time periods these tapes taken as a group or revised will become an instructional aspect of the demonstration technique which trains therapists, teachers, and case workers to utilize the video tape technique with children. Thus it is a strong suggestion of the research personnel that the reader not consider himself to have studied or understood the video tape protocol technique without reviewing the majority of the 20 tapes prepared within the experiment and to review these, hopefully, while in communication with project personnel and reading carefully the data reported in the remainder of these results.

We would hope that those planning to utilize this technique in future research or in regular inter-agency communication would begin through consultation with the experimenters and would eventually adapt the technique to their own applications.

With respect to the research report, it is then stated that the primary and initial result of the experiment is the 20 video tapes which are retained at the Multiple Disabilities Project Office, 907 South Crouse Avenue, Syracuse University, Syracuse, New York 13210.

It is hoped that by the conclusion of the three year project concerned with communication, adjustment, and learning of the severely multi-handicapped child, that sufficient interest and usefulness in and for these tapes will have been found to warrant support for the production of duplicate recordings and other

products of the experiment for dissemination. Steps have recently been taken in this direction for immediate distribution of each year's tape product.

Product II: Judgmental Data

The data taken from the behavior rating forms prepared by each consultant judge viewing each of the 20 tapes and making a separate rating for each ten-minute segment within each of the 20 tapes are reported in two distinct displays. Tables 1-5 display the data for each situation. That is, the ratings shown on Table 1 are those for the ten-minute segment concerned with unstructured orientation, Table 2 with task orientation, Table 3 with stimulus orientation, Table 4 with interpersonal orientation, and Table 5 with the interview results. The most critical inspection of the data with respect to the primary objective of the experiment is to determine whether or not a variety of behaviors within each of the eight categories examined--rated were reported. One of the more meaningful pieces of data in each of Tables 1-5 is the percentage of "no" responses per category with response examined. The lower the number of "no" responses the generally more desirable is that situation for observing the behavior. The rating "no" was chosen by the judge when in his opinion he had no opportunity to observe the kind of behavior identified in that response category in that ten-minute segment. For example, in Table 1 (unstructured orientation) can can see that within three percent ratings for visual receptive behavior and tactile receptive behavior were relatively easy for the judges to ascertain. However, gustatorial effects on behavior could not be observed 65 percent of the time, indicating that this particular situation was a poor occasion for inspecting that sensory modality.

Technically each table represents the distribution for 1600 discrete judgments. That is, ten judges rating 20 children on eight behavioral categories produce a result of 200 judgments per category or 1600 per situation. This result taken over the five tables for the five situations produces 8000 discrete entries or data items.

It is probably wise for the reader to inspect Tables 1-4 separately from the information in Table 5, which is the result of reactions to the interview data. This is somewhat distinct from the information of Tables 1-4 which is based on direct observation. With respect to Tables 1-4 in general it may be stated that the opportunity to observe a variety of types of behavior within each of the situations is apparently present. It is also true that the

Table 1

The Number and Percentage of Ratings in Each Behavioral Level for Each Behavior Category: Situation I (Unstructured Orientation)

Behavior Category	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
Aud. Recep. Behav.	29(15%)	83(42%)	36(18%)	30(15%)	15(7%)	6(3%)	199
Vis. Recep. Behav.	6(3%)	7(4%)	63(31%)	74(37%)	38(19%)	12(6%)	200
Tactile Recep. Behav.	6(3%)	6(3%)	62(31%)	85(43%)	35(17%)	6(3%)	200
Gust. Olfact. Rec. Behav.	128(65%)	26(13%)	36(18%)	7(3.5%)	1(0.5%)	0(0)	198
Obj. Cent. Comm.	9(5%)	18(9%)	66(33%)	75(38%)	23(12%)	7(3%)	198
People Cent. Comm.	24(12%)	32(16%)	71(35%)	55(28%)	8(4%)	9(5%)	199
Tactile Motor Comm.	13(7%)	21(10%)	70(35%)	67(34%)	25(12%)	4(2%)	200
Oral Exp. Comm.	25(12%)	35(17%)	103(51%)	27(14%)	7(4%)	3(2%)	200
Total	240(15%)	228(14%)	507(32%)	420(26%)	152(10%)	47(3%)	1594
Mean	30	28.15	63.4	52.5	19	5.9	

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

Table 2

The Number and Percentage of Ratings in Each Behavioral Level for Each Behavioral Level in Each Behavior Category: Situation II (Task Orientation)

Behavior Category	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
Aud. Recep. Behav.	24 (12%)	81 (41%)	24 (12%)	24 (12%)	16 (8%)	13 (7%)	199
Vis. Recep. Behav.	6 (3%)	8 (4%)	35 (18%)	88 (44%)	47 (24%)	15 (7%)	199
Tactile Recep. Behav.	0 (0%)	5 (3%)	49 (25%)	87 (44%)	44 (22%)	12 (6%)	197
Gust. Olfact. Rec. Behav.	130 (67%)	26 (13%)	27 (14%)	7 (4%)	3 (2%)	0 (0%)	193
Obj. Cent. Comm.	3 (1%)	9 (5%)	62 (31%)	75 (38%)	40 (20%)	9 (5%)	198
People Cent. Comm.	12 (6%)	18 (9%)	73 (36%)	71 (36%)	17 (8%)	9 (5%)	200
Tactile Motor	5 (3%)	8 (4%)	60 (30%)	88 (45%)	26 (13%)	10 (5%)	197
Oral Exp. Comm.	11 (6%)	22 (11%)	124 (62%)	33 (16%)	8 (4%)	2 (1%)	200
Total	191 (12%)	177 (11%)	471 (30%)	473 (30%)	201 (13%)	70 (4%)	1583
Mean	23.9	22.1	58.9	59.1	25.1	8.75	

[a] No opportunity to observe behavior.

[b] Non-functioning system in this area.

[c] Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d] Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e] Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f] Normal for age for any child.

Table 3

The Number and Percentage of Ratings in Each Behavioral Level for Each Behavior Category: Situation III (Stimulus Orientation)

Behavior Category	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
Aud. Recep. Behav.	16(8%)	84(42%)	34(17%)	32(16%)	21(11%)	12(6%)	199
Vis. Recep. Behav.	1(1%)	7(3%)	32(16%)	94(47%)	52(26%)	14(7%)	200
Tactile Recep. Behav.	1(0.5%)	2(1%)	49(24%)	91(46%)	43(22%)	13(6.5%)	199
Gust. Olfact. Rec. Behav.	18(9%)	6(3%)	61(31%)	74(37%)	29(15%)	9(5%)	197
Obj. Cent. Comm.	4(2%)	8(4%)	67(34%)	68(34%)	40(20%)	12(6%)	199
People Cent. Comm.	14(7%)	16(8%)	84(42%)	51(26%)	25(12%)	9(5%)	199
Tactile Motor	8(4%)	7(3%)	59(30%)	80(40%)	35(18%)	9(5%)	198
Oral Exp. Comm.	7(4%)	14(7%)	137(68%)	29(14%)	10(5%)	3(2%)	200
Total	69(4%)	144(9%)	523(33%)	519(33%)	255(16%)	81(5%)	1591
Mean	8.6	18	65.4	64.9	31.9	10.1	

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

Table 4

The Number and Percentage of Ratings in Each Behavioral Level for Each Behavior Category: Situation IV (Interpersonal Orientation)

Behavior Category	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
Aud. Recep. Behav.	35 (18%)	75 (38%)	31 (16%)	30 (15%)	15 (7%)	11 (6%)	197
Vis. Recep. Behav.	15 (8%)	10 (5%)	68 (34%)	65 (33%)	26 (13%)	13 (7%)	197
Tactile Recep. Behav.	13 (7%)	6 (3%)	77 (39%)	70 (36%)	20 (10%)	10 (5%)	196
Gust. Olfact. Rec. Behav.	145 (74%)	19 (10%)	24 (12%)	7 (3%)	2 (1%)	0 (0%)	197
Obj. Cent. Comm.	88 (44%)	7 (4%)	54 (27%)	32 (16%)	10 (5%)	7 (4%)	198
People Cent. Comm.	4 (2%)	16 (8%)	82 (42%)	70 (35%)	20 (10%)	6 (3%)	198
Tactile Motor	13 (6%)	15 (8%)	80 (40%)	69 (35%)	15 (8%)	7 (3%)	199
Oral Exp. Comm.	8 (4%)	29 (14%)	109 (55%)	40 (20%)	11 (5%)	3 (2%)	200
Total	321 (20%)	177 (11%)	525 (33%)	383 (24%)	119 (8%)	57 (4%)	1582
Mean	40.1	22.1	65.6	47.9	14.9	7.1	

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enought to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

Table 5

The Number and Percentage of Ratings in Each Behavioral Level for Each Behavior Category: Situation V (Interview)

Behavior Category	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
Aud. Recep. Behav.	8(4%)	84(42%)	30(15%)	26(13%)	32(16%)	19(10%)	199
Vis. Recep. Behav.	1(1%)	9(5%)	25(12%)	70(35%)	78(39%)	16(8%)	199
Tactile Recep. Behav.	8(4%)	5(2%)	37(19%)	90(46%)	43(22%)	14(7%)	197
Gust. Olfact. Rec. Behav.	31(15%)	10(5%)	45(23%)	79(41%)	21(11%)	9(5%)	195
Obj. Cent. Comm.	24(13%)	8(4%)	52(27%)	75(39%)	24(13%)	8(4%)	191
People Cent. Comm.	8(4%)	13(7%)	58(29%)	82(42%)	30(15%)	7(3%)	198
Tactile Motor	14(7%)	8(4%)	47(24%)	90(47%)	29(15%)	6(3%)	194
Oral Exp. Comm.	27(14%)	20(10%)	97(49%)	40(20%)	13(7%)	0(0%)	197
Total	121(8%)	157(10%)	391(25%)	552(35%)	270(17%)	79(5%)	1570
Mean	15.1	19.6	48.9	69	33.75	9.9	

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

opportunity to view behavior in each of the eight response categories was available.

Generally, Table 1 suggests that it was somewhat difficult to view gustatory-olfactory behavior in the child but that it is particularly easy to observe his visual, tactile, and object centered communication skills in this situation, although behavior was observable at all levels except the extreme upper level of gustatorial behavior.

Table 2 shows a slightly more useable finding indicating only 12 percent no responses and providing thereby a slightly larger opportunity to observe behavior.

The second display for the data obtained through the judgment techinque is shown in Tables 6-13. Each of these tables summarizes the data obtained under the observational category of auditory receptive behavior and displays this data in terms of the option for the "no" response or the rating for levels of response from 1-5 within each of the five ten-minute viewing segments on the video tape recording. Each table represents 1000 information units derived as follows: 20 judges rating each of ten subjects for a total of 200 judgments on each of five segments for a total of 1000 entries.

Table 6 reports the judgment reactions through the inspection of auditory receptive behavior for each of the five situations. Although it is apparent from the four percent "no" response to Situation 5 (the interview situation) that this particular series of interview questions was directed toward behavior. It is important to observe that relatively few "no" responses were recorded, being no more than 18 percent in the fourth video tape situation (interpersonal orientation). It is important to note that auditory behavior was observable at all levels in each of the five situations. As might be expected, the greatest amount of auditory behavior was observed in the low level activity shown in levels rating one and two with only modest amounts of auditory skills at the normal level shown. The amount of agreement within the rating categories as to the percentage of behaviors seen in that category in each of the situations should not be construed to mean that there was a correlation to the effect that a given child showed the same behavior in all situations. It should merely be interpreted to mean that over the long range or population at large, one can expect to see a wide range of behavior and for this population with stimulation techniques used it might be expected to be distributed as shown here.

Table 6

The Number and Percentage of Responses for Each Behavioral Stimulation Situation for Auditory Receptive Behavior

Situation	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
I Unstructured	29(15%)	83(42%)	36(18%)	30(15%)	15(7%)	6(3%)	199
II Task	24(12%)	81(41%)	41(20%)	24(12%)	16(8%)	13(7%)	199
III Stimulus	16(8%)	84(42%)	34(17%)	32(16%)	21(11%)	12(6%)	199
IV Interpersonal	35(18%)	75(38%)	31(16%)	30(15%)	15(7%)	11(6%)	197
V Interview	8(4%)	84(42%)	30(15%)	26(13%)	32(16%)	19(10%)	199

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

Table 7 reports the data observed with respect to visual receptive behavior. It is interesting to note that almost no "no" responses are recorded for the opportunity to judge visual receptive behavior making it apparent that in every situation judges have the opportunity to make some appraisal of individual's visual ability. It is interesting to note by contrast to Table 6, that visual receptive behavior is distributed equally well throughout the rating levels but that in general visual skills were found to be higher than those auditory skills for the group at large. Whether or not this means that the vision of deaf-blind children is better than the hearing of such children is not to be taken as a result of this experiment although it may be meaningful to some readers. It has implications of that nature to the research staff. The data can be taken to mean in this instance that there is a large opportunity in these tapes to observe behaviors that rate at levels two and three particularly.

Table 8 shows the judgments made for tactile receptive behavior in each of the five situations. It is apparent that tactile receptive behavior is observed in almost all of the video-tape segments to an extent even greater than the visual behavior shown in Table 7. It is interesting also to note that this behavior is distributed in a manner relatively similar to the visual behavior. Perhaps this is a function of the fact that visual tactile response quite often appears simultaneously in this particular population. In general, it can be said that all situations provided opportunities for observation of a range of behavior and that none should be given particular preference.

Table 9 reports the opportunity to judge gustatory-olfactory receptive behavior. This particular skill is not so easily observed as indicated by the number of "no" responses. One can imagine that to most examiners the opportunity to present stimuli to be eaten or smelled or tasted may not be as common experience as to present stimulation for other sensory modalities. It should also be apparent that although the child could pick up and smell or taste almost any item in his environment a motor act is some-thing required of him in this instance as compared with vision or audition which are relatively discrete as stimuli required of gustatory-olfactory behavior. There is a marked distinction within this modality favoring Situation 3 (stimulus orientation) and Situation 5 (the interview) of the behavioral observation situations. Only Situation 3 showed some opportunity to observe a relatively high level of gustatory-olfactory behavior and this table was remarkably superior to its nearest competitor in terms of the absence of "no" responses.

Table 7

The Number and Percentage of Responses for Each Behavioral Stimulation Situation for Visual Receptive Behavior

Situation	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
I Unstructured	6 (3%)	7 (4%)	63 (31%)	74 (37%)	38 (19%)	12 (6%)	200
II Task	6 (3%)	8 (4%)	35 (18%)	88 (44%)	47 (24%)	15 (7%)	199
III Stimulus	1 (1%)	7 (3%)	32 (16%)	94 (47%)	52 (26%)	14 (7%)	200
IV Interpersonal	15 (8%)	10 (5%)	68 (34%)	65 (33%)	26 (13%)	13 (7%)	197
V Interview	1 (1%)	9 (5%)	25 (12%)	70 (35%)	78 (39%)	16 (8%)	199

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

Table 8

The Number and Percentage of Responses for Each Behavioral Stimulation Situation for Tactile Receptive Behavior

Situation	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
I Unstructured	6 (3%)	6 (3%)	62 (31%)	85 (43%)	35 (17%)	6 (3%)	200
II Task	0 (0%)	5 (3%)	49 (25%)	87 (44%)	44 (22%)	12 (6%)	197
III Stimulus	1 (0.5%)	2 (1%)	49 (24%)	91 (46%)	43 (22%)	13 (6.5%)	199
IV Interpersonal	13 (7%)	6 (3%)	77 (39%)	70 (36%)	20 (10%)	10 (5%)	196
V Interview	8 (4%)	5 (2%)	37 (19%)	90 (46%)	43 (22%)	14 (7%)	197

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

Table 9

The Number and Percentage of Responses for Each Behavioral Stimulation Situation for Gustatory-Olfactory Behavior

Situation	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
I Unstructured	128(65%)	26(13%)	36(18%)	7(3.5%)	1(0.5%)	0(0%)	198
II Task	130(67%)	26(13%)	27(14%)	7(4%)	3(2%)	0(0%)	193
III Stimulus	18(9%)	6(3%)	61(31%)	74(37%)	29(15%)	9(5%)	197
IV Interpersonal	145(74%)	19(10%)	24(12%)	7(3%)	2(1%)	0(0%)	197
V Interview	31(15%)	10(5%)	45(23%)	79(41%)	21(11%)	9(5%)	195

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

Table 10 shows the results when object centered communication was analyzed. The results of this table suggest that only Situation 4 with a "no" response of 44 percent might be unsuitable for long term use as an observational technique for "object centered" communication evaluation. It would appear that Situations 1, 2, or 3 are equally appropriate, providing a wide range of behavioral observation opportunities at each rating level.

Table 11 shows the results for "people centered" communication evaluation. Results here indicate that any of the four direct observational situations are relatively equal in distribution and freedom from "no" responses. These, furthermore, are all in essential agreement in terms of percentages of response with Situation 5 (the interview).

Table 12 investigates the tactile motor expressive communication judgment ratings. It suggests that no particular situation is necessarily superior in terms of freedom from the "no" response and it shows no great variation in distribution of responses throughout the five readings. Table 13 provides essentially the same results for the oral expressive communication rating.

In general, Tables 6-13 support the results as displayed previously for Tables 1-5 suggesting that Situation 3 (stimulus orientation) is that situation most generally defensible as providing the least number of opportunities where no observation could occur and providing a wide range of distributed observations by judges. It suggests that if this group of subjects and judges is typical, this situation should in the long run provide the widest opportunity for behavior observation in such children.

If one were to rank order the number of "no opportunity to judge" responses for each of the eight behavioral categories considering only the four video tape situations, the order of preference for maximal opportunity to judge behavior was Situation 3 (the stimulus orientation), then Situation 2 (task orientation), Situation 1 (unstructured orientation), and Situation 4 (interpersonal orientation). It may be pointed out that the tally of rank ordering produces a situation score which makes Situation 3 and 2 relatively similar or interchangeable in terms of opportunity to observe with a considerable gap between these two effective observational situations and Situations 4 and 1 which are similarly weak in their opportunity to provide good observation.

Table 10

The Number and Percentage of Responses for Each Behavioral Stimulation Situation for Object Centered Communication

Situation	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
I Unstructured	9(5%)	18(9%)	66(33%)	75(38%)	23(12%)	7(3%)	198
II Task	3(1%)	9(5%)	62(31%)	75(38%)	40(20%)	9(5%)	198
III Stimulus	4(2%)	8(4%)	67(34%)	68(34%)	40(20%)	12(6%)	199
IV Interpersonal	88(44%)	7(4%)	54(27%)	32(16%)	10(5%)	7(4%)	198
V Interview	24(13%)	8(4%)	52(27%)	75(39%)	24(13%)	8(4%)	191

[a]No opportunity to observe behavior

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

Table 11

The Number and Percentage of Responses for Each Behavioral Stimulation Situation for People Centered Communication

Situation	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
I Unstructured	24(12%)	32(16%)	71(35%)	55(28%)	8(4%)	9(5%)	199
II Task	12(6%)	18(9%)	73(36%)	71(36%)	17(8%)	9(5%)	200
III Stimulus	14(7%)	16(8%)	84(42%)	51(26%)	25(12%)	9(5%)	199
IV Interpersonal	4(2%)	16(8%)	82(42%)	70(35%)	20(10%)	6(3%)	198
V Interview	8(4%)	13(7%)	58(29%)	82(42%)	30(15%)	7(3%)	198

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

Table 12

The Number and Percentage of Responses for Each Behavioral Stimulation Situation for Tactile-Motor Expressive Communication

Situation	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
I Unstructured	13(7%)	21(10%)	70(35%)	67(24%)	25(12%)	4(2%)	200
II Task	5(3%)	8 (4%)	60(30%)	88(45%)	26(13%)	10(5%)	197
III Stimulus	8(4%)	7(3%)	59(30%)	80(40%)	35(18%)	9(5%)	198
IV Interpersonal	13(6%)	15(8%)	80(40%)	69(35%)	15(8%)	7(3%)	199
V Interview	14(7%)	8(4%)	47(24%)	90(47%)	29(15%)	6(3%)	194

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[f]Normal for age for any child.

Table 13

The Number and Percentage of Responses for Each Behavioral Stimulation Situation for Oral Expressive Communication

Situation	Rating						
	No[a]	1[b]	2[c]	3[d]	4[e]	5[f]	Total
I Unstructured	25(12%)	35(17%)	103(51%)	27(14%)	7(4%)	3(2%)	200
II Task	11(6%)	22(11%)	124(62%)	33(16%)	8(4%)	2(1%)	200
III Stimulation	7(4%)	14(7%)	137(68%)	29(14%)	10(5%)	3(2%)	200
IV Interpersonal	8(4%)	29(14%)	109(55%)	40(20%)	11(5%)	3(2%)	200
V Interview	27(14%)	20(10%)	97(49%)	40(20%)	13(7%)	0(0%)	197

[a]No opportunity to observe behavior.

[b]Non-functioning system in this area.

[c]Primitive function e.g., crying, drooling, self-stimulation, response to gross light or sound.

[d]Emerging behavior, or function apparent enough to warrant attempts to develop or augment.

[e]Sufficiently viable to use in educational planning in current state of development but below normal for age.

[e]Normal for age for any child.

A word of caution should be interjected here to the point that although Situation 4 is the least productive situation of the four used in this particular experiment, that is not to say that this would condemn it to a position of uselessness with respect to other options for reporting on children. That is, even though Situation 4 may not be the best situation of those used in this experiment it may still be a far superior technique for communication about children and for examining children when contrasted with the written report or other reporting techniques.

Testimony to the above may be found in the commentary of the consultants reacting to their judgments of the tapes at the time of the final conference wherein no situation could be found by the judges which ought to be deleted or drastically modified within the protocol procedure. Thus, the comment that items or Situations 1 and 4 are not so effective as two and three should be considered a relative statement and not prohibitive of their use.

Table 14 represents the reactions of ten judges to each of the 20 tapes for a total of 200 entries on each of nine questions concerned with direct inquiry into the value placed by the judges on the tape of each child within the framework of effectiveness in this research as well as usefulness for the stated purpose. In addition to the nine questions, which were rated on a one to five scale with one being poor and five excellent, two subjective questions were asked on the rating form and replies are shown in Appendix C. These were collected with other data by the experimenters in conversation and were written reaction to the procedure from the judges to the project staff. Table 14 shows in the right hand column for each question the number of judges responding to that question. In the left hand column it shows for each of the five rating categories, the number of judgments entered under that category. The vast majority of responses were in the upper level ratings, indicating a rather strong judgmental reaction that these tapes would be useful in observing communicative as well as other behavior and that such tapes should be used as part of the child's clinical record as well as for other research and teaching purposes. In general, it was the judges' opinion that the test materials, the settings, and the children used in the experiment were appropriate to the original criteria set. The over-all quality of the tapes was rated high by the judges with respect to technical quality.

As is often the case, some of the most useful data of this experiment were accumulated during the option for the judges to react to these tapes subjectively. Commentary from the judges has been summarized briefly and is available in Appendix C for

Table 14

The Number of Questions Asked Per Interview Per Behavior Category in Situation Five of the Video-Tape Evaluation Protocol

Behavior Category	Client Number																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Mean
Auditory Receptive	2	9	8	8	4	4	2	6	8	4	5	3	1	5	3	6	5	3	5	4	4.8
Visual Receptive	1	7	12	2	3	6	7	7	7	8	3	7	2	7	4	9	9	4	4	2	5.6
Tactile Receptive	0	2	8	2	2	2	0	5	4	3	1	5	0	2	3	2	5	5	4	2	2.8
Gustatory-Olfactory Receptive	0	2	4	0	2	0	0	2	4	3	0	3	1	4	3	6	3	2	2	2	2.2
Object Centered Communication	4	1	3	1	3	0	0	0	0	4	2	0	0	2	0	3	1	0	1	0	1.2
People Centered Communication	5	2	5	6	6	0	2	3	1	5	3	1	2	4	2	6	0	0	1	2	2.8
Tactile-Motor Expression	5	2	9	1	3	1	1	1	6	2	3	4	1	5	0	4	0	0	2	3	2.6
Oral Expression	4	6	5	2	8	1	2	3	9	2	7	2	3	2	0	0	0	4	4	5	3.5
Unclassifiable	2	3	1	3	8	1	2	5	6	9	3	4	2	9	3	13	2	1	4	5	4.3
Mean	2.6	4	6.1	2.7	4.3	2.1	1.7	3.6	5	4.4	3	3.2	1.3	4.4	2	5.4	2.7	2.1	3	2.7	

inspection. These commentaries have been reviewed with the various judges by the project staff, were discussed between judges and are reported in other forms in the summary of the final conference shown in the same appendix. The effect of these narratives (reactions to the tape viewing process) and the discussions of the final conference are best reflected in the variation found between the prototype protocol and the behavior rating form shown in the results section.

Table 14 reports the numbers of questions asked in each Behavior Rating Form category for each tape, and thereby shows the distribution of the questions according to behavior areas. Obviously the questions varied widely in number from subject to subject and were distributed throughout each of the behavior rating categories.

Appendix B shows the specific questions asked in each of the taped interviews and the category of behavior into which it is believed to inquire.

Video Tape Recording Precautions

It was observed in the course of this experiment that although video tape recording was probably correctly chosen as the most suitable medium for enhancing communication between agencies and experimentation in case reporting for the severely multi-sensorily impaired child, at the same time there are limitations in the video tape recording procedure which should be known to future experimenters and clinical workers who may use the technique.

One of the first problems encountered was that of the microphone placement. It had been hoped and assumed prior to the experiment that as in many observation resources a single microphone centered and suspended within the examining room would prove sufficiently sensitive to collect the vocal and other sounds produced within the room and particularly those by the subject. It became clear in preliminary testing and taping that this was not the case for the particular microphones which accompany the Sony tri-pak equipment. Other high quality microphones including a hypersensitive electra-voice probe microphone were employed unsatisfactorily. In the end, three solutions to the problems were found but varied with the particular situation or context in which the tapes were being taken. The first and most obvious solution to the problem was most frequently utilized--it included the use of long extension lines for the standard equipment microphones and the use of a research assistant to stay within

approximately 18 inches of the child with the microphone at all times. In general, with the microphone at this distance, satisfactory audio signals can be recorded. Such might not be the case if more varied and precise vocal behavior were being recorded and studied as might be true with other populations. A second solution to the microphoning problem was the utilization of the Edcor Sensa-Mike and its compatible FM receiver. The use of this microphone allowed broadcasting well within the range of any building in which VTR procedures were carried out. In general, the microphone produced a higher quality audio recording than the standard equipment microphone but retained one limitation in that it requires close proximity to the sound source when the subject's vocalization is being studied. The elimination of the conductor cable, however, is a considerable asset as the hyperactivity of the children and the size of the testing space increased.

A third solution to the microphone problem was the utilization of the Porta-Pak Sony-GE Equipment. It appears that the microphone characteristics of this instrument are much better adapted to the general needs of the research project. In general it is safe to assume that this microphone and video equipment are more suitable with respect to quality of image (auditory or visual) to be recorded. The only limitation of this equipment as opposed to the tri-pak is that only twenty-minute tapes can be taken, and the microphone cannot be employed in a camera mounted position when taping through one way observation mirrors unless wall connections are available. In the case of this particular population one way mirrors were not used since the equipment in the testing room did not seem to be a disturbing problem. This was especially true when zoom lenses were used. With other populations this might not be the case.

The second problem encountered in the VTR procedures was that of lighting. It was discovered early in the pre-testing period that unfortunately most treatment and clinical facilities are lighted by soft overhead lights and that relatively little amounts of light are on a subject at or below his face level. For this reason shadows that are face down on the subject produce difficulties in observing manual behavior conducted when the child is leaning forward, often at a table. Shadows on the face make facila expression as well as patterns of movements of the mouth and oral cavity difficult to observe. A second characteristic encountered in the lighting of the treatment and testing rooms was that frequently these rooms employed light colored walls which in combination with the overhead light source produced a bright reflective surface serving as a depressant to the compensating automatic gain control which regulates the over-all contrast of

the VTR equipment. Thus, in attempting to secure clear photographs of facial and close body activities of the child the brightness of the room could not, in essence, be overcome due to the automatic nature of the equipment. In addition to these problems, the placement of windows in testing rooms can create bright flashes which as the camera moves around the room cause the equipment to readjust itself (to photograph through the window rather than objects on the camera side of the window). For this reason, prior to taping some reasonable study of the light characteristics of a room ought to be conducted. In general, it seems advisable first to look for a background other than a bright room wall, second, to draw the shades on windows, or place the window to the back of the camera and third, when possible to add lights at the level of the subject's face located relatively near the camera.

Although the video tape recording technique had some initial problems for individualized use, it is substantially superior to any other technique employed or explored in the solution of the clinical problems for which this investigation was undertaken.

Table 15 shows the number of responses for each category from "poor" (1) to "excellent" (5) and the number of judgments rendered by the ten judges for each of the nine rated questions on the video tape rating sheet used at the conclusion of judging each of the 20 video tapes. The ratings were generally high indicating favorable reaction of the judges to the tapes as teaching, research and clinically useful instruments.

Product III: Final Protocol

The third product of this experiment is the attached Video Tape Recording Protocol for the evaluation of communicative behavior in severely multi-sensorily handicapped children.

Table 15

Percent of Judgments Per Rating Category for

Ten Judges on the Video Tape

Procedure Rating Form

1.	Is this situation useful to the examiner observing communicative behavior?								
	poor								excellent
	1. (1%)	2. (3%)	3. (30)	4. (42%)	5. (24%)				
2.	Is this form useful in observing <u>other</u> <u>than</u> communicative behavior in the over-all evaluation of the child?								
	poor								excellent
	1. (0%)	2. (1%)	3. (15%)	4. (52%)	5. (32%)				
3.	Does this tape have uses for research other than this particular experiment?								
	poor								excellent
	1. (0%)	2. (4%)	3. (28%)	4. (48%)	5. (21%)				
4.	Would this film be a useful addendum to a child's record?								
	poor								excellent
	1. (1%)	2. (16%)	3. (19%)	4. (17%)	5. (62%)				
5.	Is this particular tape a useful teaching aid to professional workers?								
	poor								excellent
	1. (0%)	2. (2%)	3. (24%)	4. (43%)	5. (31%)				
6.	Was the child chosen appropriate for the experiment?								
	poor								excellent
	1. (3%)	2. (5%)	3. (14%)	4. (38%)	5. (39%)				
7.	Were the testing materials appropriate?								
	poor								excellent
	1. (0%)	2. (7%)	3. (31%)	4. (35%)	5. (27%)				
8.	Were the settings appropriate?								
	poor								excellent
	1. (1%)	2. (4%)	3. (28%)	4. (47%)	5. (21%)				
9.	Was the technical quality of the videotape satisfactory?								
	poor								excellent
	1. (1%)	2. (7%)	3. (18%)	4. (41%)	5. (33%)				
10.	What aspects of this film should be particularly reviewed at the post conference?								
11.	What suggestions do you have for altering the situations for greater usefulness?								

APPENDIX A

LIST OF STIMULUS MATERIALS USED

Light

mirror
magnifying glass
combination flashlight
  w/ red flasher
plug-in night light
pen flashlight

Movement

windup black dog & puppy
Jack-in-the-box
green rubber windup elf
friction car
blue elephant windup toy

Noise

wrist bells
whistle
triangle
transistor radio
pop gun
musical ball
maracas (2)
harmonica
artificial larynx
animal voice box (cow)
animal voice box (cat)
air horn

Shape

Seguin form board
raised form board
puzzles
giant snap rings & beads
assorted 1/2" blocks
mannequin in 16 pieces

Smell

vinegar
spirit of camphor
peppermint
oil of wintergreen
oil of cloves
oil of citronella
cascara sagrada
anise
ammonia

Taste

peanut butter & jelly crackers
M & M candies
marshmallows
lemon extract
animal crackers

Texture

sticky pictures
slinky
scotch tape
satin
sand paper
pom-poms
play-doh
masking tape
leather
heavy net
hard rubber aligator
furry lamb
foil-like material
foam rubber Donald Duck
felt
burlap

Vibrators

pink bullet-shaped vibrator
back scratcher

Others

Add-a-count-scale
auditory trainer
balloons
busy board
1 1/4" color cubes
color stacking discs
finger puppet
fit-a-space
geometric insets
graded cylinder blocks with knobs
graduated color forms
50" inflatable clown
Jack-n-Jill TV-radio
jumbo beads
kittie-in-the-keg
learning tower
musical top
pounding bench
puzzles with small knobs
rubber ball
shape sorting box
turn-a-gear
wading pool
wood puzzles
wooden nesting boxes

APPENDIX B

QUESTIONS ASKED DURING EACH INTERVIEW

Tape #1

1. How long have you known _____? (9)

2. Did she change much after she was in the hospital? (9)

3. We want to know how well the children see and hear. (1-2)

4. How does she get you to do things that she wants you to do? (5-6-7-8)

5. Does she ever point? (7)

6. Does she ever make sounds or use a certain kind of cry to get what she wants? (8)

7. Does she play with the other children? (6)

8. When she gets angry or frustrated, how does she react? (5-6-7-8)

9. Is she much of a fighter? Kicking? Biting? (7)

10. Can she tell the difference between people? (6)

11. Do you know anything else about how she communicates? (5-6-7-8)

12. Does she like water play? Splashing? (5)

13. She wears a hearing aid--does it make any difference whether she has it on or not? (1)

Tape #2 Interview Questions

1. We want your best opinion as to whether he hears and sees, uses his hearing and sight for any kind of communication purposes? (1-2)

The parenthetical number after each question shows how that question was tallied for each of the nine categories in Table 14.

2. Do you think he hears at all? (1)

3. He wears hearing aids--that makes a difference? (1)

4. Do you think his behavior is any different with the hearing aid on or off? (1)

5. Does he work any different with it on or off? (1)

6. When he plays without the hearing aid, does he make any noise? (1-8)

7. Does he try to use sound to communicate with people? (8)

8. Do you think he's getting more use of sound? (1)

9. Is there any difference toward the teacher--when she's talking or not? (1)

10. Does he look at your face or mouth when you are talking? (1-2)

11. How does he get you to do something for him? (5-6-7-8)

12. Does he cry differently or make different sounds when he wants different things? (8)

13. When he laughs, is there any sound in his laughter? (8)

14. Does he cry with sound? (8)

15. As to vision, does he get anything out of his glasses? (2)

16. Does he pay attention to light? Does he pay attention to the color of the light? (2)

17. What are the small things he sees at close range? (2)

18. Does he see movement, is he distracted by movements around him? (2)

19. Does he use vision to get around through the building? (2)

20. Is he good with his hands in discriminating shapes? (3)

21. Is he easy to communicate with through touch? (3-7)

22. What about his other senses--taste? (4)

23. Does he like sweet or sour? (4)

24. Does he enjoy any activities--such as tumbling? (9)

25. Do you think he shows much sign of thinking ability, such as solving problems? (9)

26. Have you seen him solve any problems cleverly by himself, by thinking it out? (9)

27. Does he tell the difference between people? (6)

Tape #3 Interview Questions

1. What kinds of things can he see? What kind of things? (2)

2. He can see light a long distance away? How dim a light? (2)

3. As far as distinguishing one light from another? (2)

4. How small a thing can he see? Can he see a pill? (2)

5. Can he see anything beyond 3'? How far can he see? (2)

6. How far can he follow a ball (visually)? (2)

7. How much can he hear? (1)

8. Does he hear any kinds of sound? (1)

9. How far away would the hairdryer be? So anytime you turn it on or off he would be afraid? (1)

10. How about hand claps or anything like this? Supposing someone screamed--like they were angry? (1)

11. Do you ever notice anything different? He likes to watch television you say? (2)

12. Do you see a change in his movements when music comes on? (1-7)

13. What does he do with touch? (3)

14. What does he like to feel most? (3)

15. Is he afraid of anything? Furry things, rough things? Gooey things? Any rotten fruit? (3-4)

16. Does he prefer any kind of texture when he's tasting anything with his mouth? (4)

17. Does temperature make a difference? (3)

18. Does he like cold things over warm? (3)

19. How about different kinds of sounds he makes? He cries? (8)

20. When does he use these (e.g., above)? (8)

21. Then there's a lot of body movement and all, what about when he wants something? (6)

22. How about food? If you didn't give him juice, say? (4)

23. Does he have any sounds he makes in anger? Supposing you're trying to get him to do something, does he make these sounds? (8)

24. Does he use finger paints, you say--how about crayons, pencils? (7)

25. He doesn't write on walls? (7)

26. Do you use magic markers? (2)

27. How do you communicate, or he communicate? (5-6-7-8)

28. What kind of gestures do you use? Suppose he wants to push away? (7)

29. Does he point? (7)

30. Then he will pull on something if he wants to? (7)

31. How does he show that he's afraid of something? (5)

32. Is there any other objects he's afraid of? (5)

33. What would that be? (About fear of doctors)? (6)

34. How can you make him calm? (1-2-3-4)

35. Is there anything that would take longer to calm him down than others? (1-2-3-4)

36. Who can communicate with him? (6)

37. How do you talk with your hands to him? (2-3)

38. How many words do you have? (1)

39. And he knows all these signs? (3)

40. Any other members of the family who can communicate better than others? (6)

41. All the kids are about the same? (6)

42. What has he been taught--taught by someone else as far as speech or language? (8)

43. Has he ever had a speech therapist? (9)

44. He doesn't do things with his hands? You said that he did a couple of things with her, what are they? (7)

45. Would he ever work with cards? (2)

Tape #4 Interview Questions

1. How long have you known him? (9)

2. Do you think you can tell me what you think he can hear? Can he see? (1-2)

3. How well can he hear? Do you think he can hear as well as you do? (1)

4. Does he use his hearing? (1)

5. Does he use his hearing with other children? Like when he's playing, does he use his hearing to direct himself around to find other children? Does he play with other children? (1-6)

6. If they come over and find him, what does he do? (6)

7. Does he play rough games? Sliding board, swings and things like that, or does he sit and play quietly? (6)

8. Does he recognize different people by their voice? Doesn't make any difference particularly? (1)

9. To a stranger he would respond to just as well as somebody that he knows? (6)

10. How does he get around? Does he use feeling or sound? (1-3)

11. What about when it's time to eat, does he follow directions that you give him? (1-2-3)

12. Does he feed himself? (9)

13. When he wants to get you to do something, how does he do it? (5-6-7-8)

14. He doesn't try to get you to do anything? (6)

15. If he's wet, he doesn't want you to change him? (9)

16. Does he make much noise with his mouth? That is sounds . . . ? But it's not related to anything you do? What does he do to music?

Tape #5 Interview Questions--Mother

1. Does he tell you in any way that he wants you to do something? (5-6-7-8)

2. Do you just put a little sugar in? (4)

3. Do you think its because of color? (2)

4. Are there things he strongly dislikes? (5)

5. If he doesn't like something, what does he do with it? How does he get rid of it? (5-7-8)

6. Does he get mad enough to cry? (8)

7. Does he cry for any other reason? (8)

8. Does he have cries you can tell the difference between, for instance, between hurt and angry cries? (8)

9. When he acts sick does he cough? Make noise when he coughs? (8)

10. Does he laugh? (8)

11. What are some things that make him laugh? (1-2-3-4)

12. Does he laugh with noise, so you can hear it? (8)

13. Does he smile, so you can see it? (7)

14. Are there people he communicates with better than others? (6)

15. What do they do that you know of that allows him to communicate? (6)

16. Earphones? (1)

17. Do you think he hears anything at all? (1)

18. Is he any different at all the way he behaves with hearing aid on or when he doesn't have them on? (1)

19. How long has he had the hearing aid? (9)

20. Does he go to any other school? (9)

21. Has the school given you any reports on how he gets along with the other children? (6)

22. Do you think he does most things by seeing or by touch, say? (2-3)

23. What about his other skills like his ability to tell the difference between people familiar not familiar, is he uncomfortable around strangers? (6)

24. Does anyone else live at your house? (9)

25. How old is that little girl? (9)

26. Do they get to be together? (9)

27. Have you ever tried particularly to teach him something? (9)

28. Have you tried at all to teach him to put on his clothes? (9)

29. Do you think you do more for him than you should, or do you make him do things for himself? (6)

30. Have you tried to teach him to feed himself? (9)

Tape #6 Interview Questions

1. Tell me about those things he hears or if he hears or when he hears? (1)

2. Has he ever been to have his hearing tested at someplace? (1)

3. Did they suggest a hearing aid or anything like that? (1)

4. When you teach him around the house, do you talk to him as of he could hear? (1)

5. He can tell by feeling them (foods) that he doesn't like them? (3)

6. Can you keep him in a high chair? (9)

7. When he doesn't want something, does he push it away or make sounds? (7-8)

8. Does he use his vision? Do you think he sees where he's putting things? (2)

9. Does it bother him to be in the dark and do these things? Does it matter whether it's dark or light to him? (2)

10. What does he do when he sees a television set? (2)

11. Does he notice the picture? (2)

12. When he's going around the house, does he use his vision or follow the wall with his hand? (2-3)

13. Do you think he uses one eye more than another to look with? (2)

Tape #7 Interview Questions

1. How much does he hear? (1)
2. What is wrong with his eyes? (2)
3. Can he read any print? (2)
4. How small a thing can he see? And how far away? (2)
5. Does he use glasses? (2)
6. And he doesn't use a magnifying glass? (2)
7. In an action picture can he tell whether the boy is smiling? (2)
8. He seems to be doing well in speech. I imaging he's improved quite a lot? (8)
9. How much time does he spend in the classroom here? (9)
10. Does he use his sight more than his hearing? (1-2)
11. How does he play with the other children? (6)
12. Does he crave talking with adults? (6-8)
13. Does he use his hands a lot? (7)
14. Does he try the buttons on his clothes? (9)

Tape #8 Interview Questions

1. Tell us what your relationship to _____ is? (9)
2. Do you think he can hear at all? (1)
3. Do you ever see any occasions where he jumps to a loud sound? (1)
4. Does he take it (hearing aid) off and throw it away? (1)
5. When he first came was his hearing any different? (1)

6. What about his vision, does he use it a great deal or a little bit? (2)

7. Can he recognize most things that are in his daily life? (2)

8. When he sees things and goes over to them, what does he do? Does he feel them or mouth them? (2-3-4)

9. How does he deal with people to recognize them? Does he use touch much or vision? (2-3)

10. Does he make noise then, like with his mouth, speech sounds? (8)

11. When he cries, does he make noise? (8)

12. Does he get around the grounds and the building pretty much by vision or does he use touch? (2-3)

13. Does he view change from day to day? Does he accept you better some days than others? (9)

14. What about your getting ideas to him? If you want to get him to do something, how do you get it across to him? (1-2-3-4)

15. Pretty much touch and vision that you direct him with? When yor're with him, do you use speech pretty much? (2-3-4)

16. Do you think he can think a good deal, solve problems? (9)

17. Did you ever see him do anything clever? (9)

18. Does he play with any children at all? (6)

19. Does he have anyone among the children that he communicates with? (6)

20. As to simple wants like food or go to the bathroom, how does he let you know? (6-7-8)

21. Does he chew candy or anything like that? (9)

Tape #9 Interview Questions

1. Tell me what things she does; sensory abilities she had? (1-2-3-4)

2. What does she see? (2)

3. Close up to her could she see a coin or something that size? (2)

4. Across the room what could she see? Could she see a person? (2)

5. Could she see movement of a person across the room? (2)

6. How does she use her sight? (2)

7. Does she use it to avoid things? (2)

8. How about avoiding work? Would she use it to shine light in eyes? To avoid someone? (6)

9. How about her hearing? (1)

10. Can you give any instances of what she hears? (1)

11. Will she stop if you tell her to? (1)

12. What other commands will she follow? (1)

13. Like will she put something down if asked? "Give it to me." (1)

14. Does she startle to noise? Like what? (1)

15. What is the startle? Jump, cry or what? (7-8)

16. Does she vocalize to sounds; look to something making noise? (8-1)

17. Does she have any sounds she uses herself? (8)

18. She doesn't have any words though? (8)

19. Does she make any special sounds when angry? What? (8)

20. When she cries, is it a baby type vocal cry? (8)

21. She doesn't scream? (8)

22. Have you heard her imitate other children? Will she imitate sounds you make? Ba, ba, ba, da, da, da? (8)

23. Does she have any likes or dislikes for foods? (4)

24. Is this taste or texture, do you think? (3-4)

25. She doesn't avoid hard things like crackers or things like that? (3)

26. Anything bother her as far as touch, fuzzy, hard cold, any phobia? (3)

27. What does she enjoy? (9)

28. Does this (walking down stairs) frighten her? (9)

29. What can she do as far as getting dressed? (9)

30. Does she tell you when she has wet pants? Gets angry or anything? (7-8)

31. As far as any other self-help skills, does she do anything? Reach for soap or such? Spoon too? She doesn't use a fork yet? (9)

32. How about trouble swallowing, choking? (4)

33. How about any mannerisms? Blindisms? (9)

34. How about when angry, any special movements? (7)

35. Bang her head, roll, hit her head? (7)

36. Any other times does she do that? (7)

37. Grind her teeth? When? (7)

38. When is there no activity? Night? (9)

Tape #10 Interview Questions

1. What kinds of things do you think he can see? (2)

2. Can he see something the size of a pill? Will be localize? (3)

3. Does he recognize people? (6)

4. Does he have favorites in people? (6)

5. Does he run to you, try to find you, favor you? (6)

6. Can he read any words? (2)

7. Can he recognize words? (2)

8. Can he recognize pictures? (2)

9. Does he have access to television? (9)

10. Does he match pictures with objects? (2)

11. How is his hearing with hearing aid on? (1)

12. Is he quieter or more active depending upon the noise level in the building? (1)

13. What does he do if someone shouts at him? (1)

14. Does he know if you're angry, happy? (6)

15. What kinds of commands does he follow? (1-2-3)

16. Is there any time when he is more active than at other times during the day? (9)

17. Does he sleep soundly? (9)

18. Does he go to bed early in the evening? (9)

19. How does he play? (5-6)

20. What does he play with? (5)

21. What does he do with the doll; how does he play with it? Does he ever dress it? (5)

22. Does he talk or gesture to the doll? (8-5-7)

23. Does he make a lot of different sounds? (8)

24. Has there been any time when he's been scared? (9)

25. What does he like to eat? Any preferences? (4)

26. Does he like something sticky (like peanut butter) as well as something like a hard roll? (3-4)

27. Does he have a color preference? (2)

28. Does he use a spoon? (9)

29. Does he wash himself? (9)

30. Does he brush his teeth? (9)

31. Does he like toothpaste? (4)

32. Tell me about things he likes or doesn't like to touch? (3)

33. Does he grind his teeth? (9)

34. Does he ever hit his head? (7)

Tape #11 Interview Questions

1. Did you know _____ very long? (9)

2. Do you think he can hear? (1)

3. How did you decide that? What does he do that makes you think he can hear? (1)

4. Did you think he hears as well as any normal hearing child? (1)

5. Can he hear a whisper? Do you ever whisper to him? (1)

6. How well does he see? (2)

7. When outside can he see things a long way off? (2)

8. How does he let you know what he wants? (7-8)

9. He makes noise? (8)

10. When he wants to be fed, how does he tell you? (7-8-5)

11. Does he recognize words that you say to him, such as ball? (1)

12. Do you ever have to show him also? (2-3)

13. How does he play with the other children, or does he? (6)

14. When he plays by himself, does he make sounds? (8)

15. Do any of these sounds sound like words? (8)

16. When he is afraid, what does he do? Have you ever seen him afraid? (9)

17. How do you make him happy? (5-6)

18. What about anger? (9)

19. Does he make noise then? (8)

20. Can you think of anything else in the way that he communicates with people? (6-7-8)

Tape #12 Interview Questions

1. You work with _____? You're with him during the daytime? Morning or night? (9)

2. What does he eat? (4)

3. Does he drop the spoon or whatever or what? (9)

4. Can you tell him to pick up his spoon or anything like that? Would he do it? (1-2-3)

5. If you just touch his hand he will do it? (3)

6. Does he use a cup? (9)

7. Is there any time when he's taken a glass, picked it up, taken a drink and put it back down without spilling it? (9)

8. If you don't guide his hand, does he just drop it? (3)

9. Can you guide him or touch him and have him do anything else? (3)

10. When he is waving his hand and you point to it then he'll . . . ? (2)

11. Have you ever noticed him coming toward you because he recognizes you or anything? (1-2-4-6)

12. How far away do you think he can see you? (2)

13. How far do you think he can see? (2)

14. Does he see small things, like on a table? Do you ever see him picking them up or doing anything? (2)

15. What makes him mad? (1-2-3-4)

16. And how does he show his anger? (7-8)

17. What noises does he make? Does he make a variety of noises? Say anything? (8)

18. When he gets really angry does he hit his head? (7)

19. Does he ever bite himself? Grind his teeth? When does he do that? (7)

20. Does he ever hit or bite anyone else? Strike out at any of the other children? (7)

Tape #13 Interview Questions

1. Has he got some speech, some language, some effort to communicate with people? (8-7-6)

2. Was he walking when he came here? (9)

3. Is he toilet trained now? (9)

4. Does he communicate with any of the children in that group or does he just talk to the teachers? (6-8)

5. Can you tell me something about his vision? (2)

6. Do you think he uses his hearing or his vision most in his daily play? (1-2)

7. Are his eating habits good? (4)

8. Does he talk with his parents or others when he goes home? (8)

Tape #14 Interview Questions

1. What kinds of things does he see when you're working with him? How much can he see? (2)

2. Does he recognize people all right? (1-2-3-4)

3. How about objects? How far away can he see a little rubber ball? (2)

4. Does it take him time to localize on it or can he just see it? (2)

5. When he's doing that, he just sort of tuned out? (9)

6. He doesn't see anything then or hear anything? (1-2)

7. When he's looking at something can you see his eyes looking at it or is he looking sideways or something? (2)

8. How about hearing? Does he hear anything? Very good? (1)

9. As long as he doesn't tune out, he's hearing probably most everything? (1)

10. Does he follow commands? If you tell him to stand up or give me something. . . ? (1-2-3-4)

11. Maybe delayed, may be a minute? (9)

12. Will he stop and not do anything? (9)

13. When you do that, how long does it take him to come back then? (9)

14. It's like he's day dreaming? Only more so? (9)

15. Does he eat pretty well? (4)

16. Does he use spoon alright, fork? (9)

17. Does he drink out of a cup? (9)

18. What does he do with other children? (6)

19. Just sort of doesn't pay attention to them? (6)

20. Does he ever get in fights? (6)

21. How about getting you to understand things? Is there any way he can tell you what he wants? (7-8)

22. And he'll pull you to something if he wants it? (7)

23. He has no sounds for water or food or anything like that? (8)

24. Can you think of anything that interests him more than anything else? That he has fun with or plays with? (5)

25. What makes him happiest? (9)

26. He's sort of the same not happy, not mad? (9)

27. When he does get angry, does he do anything like hitting his head? (7)

28. Does he bite hard? (7)

29. He doesn't make teeth marks? (7)

30. Does he chew on other things? (4)

31. What toy does he like the best? Squeaky one? (5)

32. Do you think he likes adults or children better? Neither one especially? (6)

Tape #15 Interview Questions

1. How much do you think he can see? (2)

2. Does he localize on people, does he look at them, follow around at all? (2)

3. How small an object could he see? (2)

4. Does he hear anything? (1)

5. Is there any sign of looking at airplanes, thunder clouds, anything like that? (2)

6. What is he afraid of? Any special things? (9)

7. He has two way (hearing aid)? One in each ear? (1)

8. Will he throw them away (hearing aid)? (1)

9. There's nothing specific about the food? (4)

10. Is there any special taste he'd like sweet or sour taste? Candy, huh? (4)

11. How about anything sour like lemon, orange, grapefruit? (4)

12. Any texture in food that he doesn't like? Course better than fine? (3)

13. Mashed potatoes? No difference from chunky? (3)

14. Is there anything as far as touching with hands or feet like carpet less than bare floors, objects afraid of; fuzzy animals? (3)

15. Do you notice him playing with other children in any way? (6)

16. What kinds of things does he play? (9)

17. Does he have any special behavioral mannerisms? Does he grind teeth? (9)

18. Get along better with adults or children? (6)

Tape #16 Interview Questions

1. Is he the most active one you have? (9)

2. How much do you think he can see? What things can he see? (2)

3. Can he recognize food say? (2-4-3)

4. Can he localize like reach down and pick up his spoon or fork or something like that? (2)

5. How about something smaller, like a pill or a sugar cube? (2)

6. How far away could he recognize you? (2-1)

7. He wouldn't know if you were across the room? (1-2-4)

8. If you were across the room he wouldn't recognize you? Say if there were two people there, he wouldn't? (2-6-4-1)

9. He would know a person was there somewhere, but he wouldn't know it was you until he got about 2' away? (2-4)

10. Do you see any evidence of him hearing anything? (1)

11. Do you notice any difference if he has his hearing aid on? Would he go toward sounds any more than he would otherwise? (1)

12. When children are all around him in the same room, does this change his activity any? (6)

13. Does he play with the toys when the children are there and not with them when they aren't there? (5-6)

14. But he'll also play with children, or does he sort of avoid the children? (6)

15. You don't see any signs with him as playing together with children in any sort of a game or anything? (6-5)

16. Do any of the children do this? (9)

17. No, I mean any of the children you taught? (9)

18. How do they play? Walking around together or holding hands? (6-7)

19. What kinds of foods does _____ like? Does he have any special preferences? (4)

20. You don't see him really dislike anything? (9)

21. Is there anything he's afraid of? (1-2-3-4)

22. How about other animals? Say around squirrels? (9)

23. Do birds bother him? Does he ever get close enough to the pheasants? (9)

24. When he's sleeping does he have any mannerism? Does he roll a lot or bang his head? (9)

25. Do you ever notice him grinding his teeth? (9)

26. Some of the children do though? (9)

27. How about hitting his head like this when he's angry? Or doesn't he do anything like that? (7)

28. Does he ever throw his ear molds away or break them? (7-5)

29. Will he take a bath by himself or wash his hands and face? (9)

30. How does he try to help? (7)

31. He's not doing any buttons or anything like that yet? (9)

32. How about brushing his teeth? (9)

33. You're on until he gets up and till dinner? (9)

Tape #17 Interview Questions

1. Tell me just what you think he sees? (2)

2. Does he recognize pictures? (2)

3. Does he recognize objects say a toy car as a real car or anything like this? (2-3)

4. What is the smallest object he can see say at arms length? (2)

5. Do you notice a preference for color at any time? (2)

6. Does he fear any color? Does he reject any color? (2)

7. How about hearing? (1)

8. You believe he can hear what? (1)

9. That's all you have to say? You don't point or do anything? (1)

10. That's to get him to pay attention? Put your hand down to get him to go with you? (2)

11. How about anything that startles him? Or any other examples of any other kind of textures? (1-2-3-4)

12. Is he attracted or afraid of any kind of textures? (3)

13. Does he do that with anyone else? (Grab fishnet stockings) (5)

14. Have you ever noticed him being afraid to go from one room to another, say from carpet to linoleum? (1-2-3)

15. He likes peanut butter. Is there anything else he craves? (4)

16. Does he chew it? Is it chewing or swallowing? (9)

17. What doesn't he like? (9)

18. It's more the texture than the taste maybe then? (3-4)

Tape #18 Interview Questions

1. Can he see anything at all? If he can, what? (2)

2. Does he use his vision to get around with? (2)

3. Can he hear? (1)

4. Did he ever wake up to a loud sound? (1)

5. How does he use touch? Does he feel things or play with them in his hands? (3)

6. Does he like playing with water? (1-2-3)

7. How about soap in the water? Or toys in the water? (2-3-4)

8. Does he use touch to get around with? (3)

9. Did you have any observations on smell or taste as he used them? Was he repelled by the strong orders? Or tastes, were there tastes that he responds to--sweets or sours? (4)

10. Did textures in food have anything to do with it? (3)

11. What wants did he make known to you? Any kinds of sounds? (8)

12. Does he make sounds or use sounds at all? Any kinds of sounds? (8)

13. Did he babble? (8)

14. Do you think he ever had an idea? (9)

Tape #19 Interview Questions

1. Are you _____'s teacher? (9)

2. How long have you known her? (9)

3. In the 4 weeks you've known her, have you seen anything that makes you think she can hear? (1)

4. Does she respond to her name at all? (1)

5. Does she startle to any loud sounds since you've known her? (1)

6. When she cries does she make a sound? (8)

7. Does she use sound at all to communicate to you anything? (8)

8. Does she make noise when she eats? (8)

9. Can she see anything? (2)

10. Can she see anything besides the light? (2)

11. Does she use her touch at all? (3)

12. Does she play with water like when she's bathing? (1-2-3)

13. Does she play with the food in her hands? (3-4)

14. Does she show much emotion? (5-6-7-8)

15. How does she communicate to you that she's unhappy? (7-8)

16. Did you ever see her do anything that makes you think she can think? (9)

17. How does she get around? Does she use light or sound or touch? (1-2-3)

18. What's the cleverest thing she ever did? (9)

19. Are there any foods she particularly likes? (4)

Tape #20 Interview Questions

1. How long have you known _____? (9)

2. In 3 weeks did you see him do anything that made you think he could hear? (1)

3. Does he use his hearing aid? (1)

4. Can you think of something he can hear with it on and that he can't when it's not on? (1)

5. Is he dependent on them (glasses)? Does he try to find them if you take them off? (2)

6. Tell me about how he eats. (4)

7. Does he smell the food, do you think? (4)

8. Are there things he particularly likes to eat? (4)

9. Can he tell one person from another by touching them, seeing them, hearing them? Can he tell the difference between you here? (1-2-3-6)

10. When he walks does he use his touch? (3)

11. Have you ever seen him change his mind to make you think he had an idea? (9)

12. Does he show happiness or fear of any kind? (9)

13. If he doesn't want to do something how does he show you? (7-8)

14. Does he cry? (8)

15. When happy does he smile or laugh? (7-8)

16. What's the cleverest thing you've seen him do? (9)

17. Does he make any sounds that might be measured sounds? (8)

18. When he plays does he make sounds? (8)

19. Does he communicate with any other children? Does he hand them things? (6-7)

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